

CLAIMS:

1. A system for providing time dependent conditional access to information, the system comprising
 - a source sub-system (10) arranged to provide
 - successive keys encrypted in encryption control messages and
 - 5 - the information in an encrypted form that is successively decryptable with the successive keys;
 - a decoder (122) for decoding the information, with an input for receiving the keys;
 - a secure device (14) arranged for receiving the encryption control messages, decrypting the keys from the messages and supplying the keys to the decoder (122), the secure device (14)
 - 10 maintaining a time value, the secure device (14) being arranged to control the supply of the keys dependent on the time value, wherein the secure device (14) is arranged to increment the time value in response to reception of respective ones of the encryption control messages.
2. A system according to Claim 1, wherein the source sub-system (10) is
- 15 arranged to include time-stamps in the encryption control messages, the secure device (14) being arranged to decide whether to supply the keys dependent on a comparison between the time-stamps and the time value, the secure device (14) being arranged to control a size of the update according to the time-stamp, with a limitation to increases in the time value.
- 20 3. A system according to Claim 2, the secure device (14) being arranged to determine a difference between the time stamp of a current encryption control message and a further time stamp of a preceding encryption control message and to increase the time value with said difference.
- 25 4. A system according to Claim 2, wherein the source sub-system (10) is arranged to transmit encryption management messages at a lower frequency than said encryption control messages, the encryption management messages comprising time stamps, the secure device (14) being arranged to set the time value according to the time stamps in

response to receiving the encryption management messages, conditional upon receiving increasing time stamps.

5. A system according to Claim 4, arranged to process the content and encryption control messages from a time shifting memory (16), and to substitute encryption management messages from a live stream for encryption management messages from the time shifting memory (16).

6. A system according to Claim 1, wherein the source sub-system (10) is arranged to transmit encryption management messages at a lower frequency than said encryption control messages, the encryption management messages comprising time stamps, the secure device (14) being arranged to set the time value according to the time stamps in response to receiving the encryption management messages, conditional upon receiving increasing time stamps.

7. A system according to Claim 6, arranged to process the content and encryption control messages from a time shifting memory (16), and to substitute encryption management messages from a live stream for encryption management messages from the time shifting memory.

8. A system according to Claim 6, wherein the secure device (14) is arranged to disable supplying of the successive keys dependent on the time value when a predetermined number of the encryption control messages has been received after receiving a first one of the encryption management messages with a first one of the time stamps without receiving any subsequent second one of the encryption management messages with a second one of the time stamps for a time that follows a time of the first one of the time stamps.

9. A method of for providing time dependent conditional access to information, the method comprising

- transmitting successive keys encrypted in encryption control messages and the information in an encrypted form that is successively decryptable with the successive keys;
- receiving the encryption control messages
- maintaining a time value, incrementing the time value in response to reception of respective ones of the encryption control messages;

- decrypting the keys from the messages;
- controlling a supply of the keys to a decoder dependent on the time value.

10. A secure device for providing time dependent conditional access to

5 information, the secure device having

- an input for receiving successive keys encrypted in encryption control messages;
- a decryption unit for decrypting the keys from the messages;
- an output for supplying the keys to a decoder,

10 a memory for storing a time value, the secure device being arranged to control the supply of the keys dependent on the time value, wherein the secure device is arranged to increment the time value in response to reception of respective ones of the encryption control messages.

11. A computer program product comprising computer instructions for causing a secure device (14) with an input for receiving the encryption control messages to

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- maintain a time value, incrementing the time value in response to reception of respective ones of the encryption control messages;
 - decrypt the keys from the messages;
 - control a supply of the keys to a decoder dependent on the time value.